DEC 0 5 2005 &

KOREAN PATENT ABSTRACT (KR)

Patent Laid-Open Gazette

(51) IPC Code: G03G 9/13

(11) Publication No.: P1999-0063760 (43) Publication Date: 26 July 1999 (21) Application No.: 10-1998-0702227 (22) Application Date: 26 March 1998

(71) Applicant:

MINNESOTA MINING AND MANUFACTURING COMPANY 3M Center, P.O. Box 33427, Saint Paul, MN 55133-3427, U.S.A.

(72) Inventor:

BAKER, James, A.; VENKATESAN, Jai; Li, Wu-Shyong; HERMAN, Gay, L.; CORN, Stewart, H.

(54) Title of the Invention:

Liquid Inks Using a Gel Organosol

Abstract:

An organosol comprising a high molecular weight (co)polymeric steric stabilizer covalently bonded to an insoluble, high molecular weight thermoplastic (co)polymeric core is described which has the ability to form a three-dimensional gel of controlled rigidity. The gel provides improved liquid ink or liquid electrophotographic/electrographic toner compositions by increasing sedimentation stability of the colorant, without compromising print quality or ink transfer performance. The gel is formed by manipulating the solubility parameter difference between the stabilizer and the solvent to achieve optimum performance of the dispersion.